



Alpha Magnetic
Spectrometer NASA / DOE

Open Paper Management Tool Open Items Report



National Aeronautics and
Space Administration

Friday, August 22, 2008

Open Action Items Report

Open Item Number: 05-043

RID Open Date: 9/14/2005

Title: Helium Venting Hazard Analysis

Initiator(s):

Description: Provide hazard analysis for venting of helium from the main tank.

Action Item Information

Actionee(s): Gaetan Piret/ESTEC

Action Due Date: 5/1/2007

Action: Upon delivery of hazard analysis described in 05-042, evaluate potential hazards to EMI and TV test chambers.

Action Status: 8/22/2008 - CERN has confirmed that analysis is unacceptable and that external vents will be required. CERN safety is writing a document to explain this decision.
8/1/2008 - ESTEC confirms that analysis is acceptable. CERN and KSC still reviewing.
7/11/2008 - Comments received from CERN and KSC. A response to CERN's questions has been set out, and no further questions have been received. KSC has rejected the white paper, so alternative courses of action are under discussion.
5/30/2008 - Final version of white paper released - under review at CERN, ESTEC, and KSC.
3/14/2008 - Some comments provided by ESTEC - additional analysis to address their concerns is in work.
2/20/2008 - Initial analysis presented to ESTEC on 29 Jan. More detailed analysis for the two test chambers and the clean room is the process of being written up.
11/20/06 - Date rolled to May 1st to roll with 05-042.
8/14/06 - Date rolled to October 1st.
4/10/06 - Due date changed to 6/1/06 allow time after completion of 05-042.
11/12/2005 - Date changed to 4/1/2006 to match item 05-042.

Open Action Items Report

Open Item Number: 05-074

RID Open Date: 10/28/2005

Title: CGSE Support at Pad

Intiator(s): Trent Martin

Description: *It is not clear how the cryogenic GSE, particularly the piping, will be supported at the pad.*

Action Item Information

Actionee(s): Robert Becker/MIT

Action Due Date: 9/8/2008

Action: *Provide details on how the GSE will be supported at the pad.*

Action Status: 7/25/2008 - Robert Becker will provide new layouts for Phase II GSR. Date rolled to reflect.
6/13/2008 - Plan to discuss CGSE issues at July TIM - date rolled to reflect.
12/16/2007 - Pump layout comments received from Pete Reutt. New proposals under work in Shanghai to accommodate suggestions.
10/24/2007 - New layouts proposed at GOWG - New drawings/layouts in work in Shanghai.
6/4/2007 - Ken Bollweg and Mike Capell to work with Alexander Grechko to resolve file transfer problems.
11/27/06 - J. Keiffenheim reports that space is available for hanging plumbing, and KSC can design, manufacture hanging hardware. Still have concerns regarding fill port plumbing suspension, so will keep open.
10/16/06 - Date rolled to 11/15 after Cryo GSE meeting at KSC.
6/26/2006 - Date rolled to October 15th after Magnet Processing meeting at KSC.
5/15/2006 - Further discussion on handling of CGSE after PLBD close prelaunch is required.
3/24/2006 - Trent Martin to forward all data provided by KSC to Art Nelson for inclusion in ground safety package.
2/14/2006 - Alexander Gretchko waiting on information from KSC - Trent Martin to coordinate.

Open Action Items Report

Open Item Number: 07-025

RID Open Date: 11/5/2007

Title: Vacuum Pump Monitoring

Intiator(s): Jack Keifenheim

Description: Determine ground and on-board vacuum pump monitoring requirements at pad.

Action Item Information

Actionee(s): Trent Martin/JSC, Mike Capell/MIT

Action Due Date: 10/21/2008

Action: Determine what information needs to be monitored on the vacuum pumps during all ground processing scenarios. In particular, determine what monitoring is required during S0024 and the pad clears, and whether 24/7 monitoring is required.

Action Status: 8/1/2008 - Dieter Schinzel/ETH confirmed to be CGSE coordinator for KSC operations. Action due date changed to 10/21/2008 due to his current workload. Preliminary plan will be discussed at the Phase II Ground Safety Review.
6/13/2008 - Plan to discuss CGSE issues at July TIM - date rolled to reflect.
12/16/2007 - Issues to be investigate during CGSE shakedown at CERN. Action date rolled to delivery + 3 weeks (~mid-June).

Open Action Items Report

Open Item Number: 07-033

RID Open Date: 11/5/2007

Title: OPF Testing

Intiator(s): Jack Keifenheim

Description: Provide details on proposed OPF testing.

Action Item Information

Actionee(s): Peter Dennett/ESCG

Action Due Date: 1/15/2008

Action: Provide details on facility requirements for all proposed OPF tests.

Action Status: 8/22/2008 - Preliminary list sent out by Peter Dennett for review.

6/6/2008 - Tim Urban to update flowchart based on inputs from observing the HST testing and recirculate for review.

5/1/2008 - Proposal sent out for review.

12/16/2007 - Date set to 15 Jan.

Open Action Items Report

Open Item Number: 07-036

RID Open Date: 1/11/2008

Title: Cryosystem Response to Power Flickers

Initiator(s): Chris Tutt

Description: Effects of possible power losses at KSC need to be considered in the cryosystem safety analyses.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date: 9/1/2008

Action: Need details on the default state of the AMS-02 and an estimate of how long it would take to return to the standard ground operational condition.

Action Status: 5/30/2008 - Date rolled to 9/1/2008.

1/11/2008 - Initial review of default state is being rolled into safety analysis. Initial review of time to return to nominal ops indicates this should not be a concern as long as commanding is still available. More detailed review will be done with appropriate collaboration personnel at a later date.

Open Action Items Report

Open Item Number: 07-038

RID Open Date: 3/7/2008

Title: S-Band CHD Support

Intiator(s): Chris Tutt

Description: Approval of AMS use of the S-Band for CHD comes from the ICATT

Action Item Information

Actionee(s): Trent Martin/EA3, Tim Urban/ESCG

Action Due Date: 4/7/2008

Action: Meet with Susan Creasy and the ASCB to determine what information they need to approve this request.

Action Status: 8/22/2008 - Meeting scheduled for 28 Aug at 9:00AM Houston time.
8/1/2008 - Date changed to week of 18 Aug to meet ASCB schedules.
7/16/2008 - Data received from ASCB - follow-on meeting tentatively scheduled for week of August 4th.
7/11/2008 - Final repsonse provided to ASCB. Still awaiting their response to our action.
6/27/2008 - Writeup received from Mike Capell - under review at ESCG.
6/6/2008 - Potential list of Critical Health items circulated for review. Awaiting comments from collaboration.
4/24/2008 - Preliminary meeting with ASCB showed that request is possible. ASCB to provide more detail on current Ku-band/S-band coverage limits. Project to better define what information is being requested to help ASCB team prepare the justification for the request.

Open Action Items Report

Open Item Number: 07-041

RID Open Date:

Title: TRD Gas Supply ADP

Initiator(s): Leland Hill

Description: Safety documentation needs to be generated to close all safety inspections relative to the TRD Gas Supply

Action Item Information

Actionee(s): Chris Tutt

Action Due Date: 4/25/2008

Action: Work with Thorsten Siedenberg to get documentation of TRD Gas Supply heater installation and inspection, COPV acceptance data, and missing stress report items.

Action Status: 8/1/2008 - Reports delivered and all required data available. SVM memo to be written.
7/11/2008 - Aris Escalona/Arde' has promised to send missing reports.
6/13/2008 - Updated information requested from Thorsten. Awaiting response.

Open Action Items Report

Open Item Number: 07-044

RID Open Date: 4/3/2008

Title: PMT Inspections

Intiator(s): Leland Hill

Description: PMTs need appropriate safety documentation to justify multiple closures.

Action Item Information

Actionee(s): Chris Tutt

Action Due Date: 4/25/2008

Action: Work with Frank Cadoux, Stefan Schael, and Giulano Laurenti to determine what acceptance documentation exists for the PMTs in each of the various detector groups.

Action Status:

Open Action Items Report

Open Item Number: 07-048

RID Open Date: 6/6/2008

Title: Cryocooler Fill Data

Intiator(s): Leland Hill

Description: Safety verification requires proof that cryocooler have been filled with correct amount of helium.

Action Item Information

Actionee(s): Chris Tutt

Action Due Date: 6/16/2008

Action: Get a copy of the Sunpower ADP for the cryocoolers from Stuart Banks.

Action Status: 7/11/2008 - Stuart Banks will send all requested documentation by next week.

Open Action Items Report

Open Item Number: 07-049

RID Open Date: 7/11/2008

Title: On-Orbit Envelope Exceedence

Intiator(s): Trent Martin

Description: AMS-02 exceeds the on-orbit operations envelope given in SSP 57003 in two main locations: the ROEU bracket and the lower VC and support ring.

Action Item Information

Actionee(s): Leo Cornejo/Boeing

Action Due Date: 9/25/2008

Action: Gain approval of exception to SSP 57213 documenting exceedence.

Action Status: 8/7/2008 - Assembly Analysis team has raised concerns about ROEU protrusion. MAGIK AI 2279A shows no issue with ROEU. APO recommendation is for boards to fight amongst themselves and have winners request any additonal data needed.
7/16/2008 - EVA worksite analysis and assembly analysis in work. ECD is 25 Sep.

Open Action Items Report

Open Item Number: 07-050

RID Open Date: 7/11/2008

Title: PVGF Clearance Exceedence

Intiator(s): Trent Martin

Description: AMS-02 has small intrusion into PVGF approach envelope.

Action Item Information

Actionee(s): Leo Cornejo/Boeing

Action Due Date: 8/5/2008

Action: Gain approval of exception to SSP 57213 documenting exceedence.

Action Status: 7/16/2008 - Presentation to SEWG scheduled for 22 July, estimated closure date is 5 Aug.

Open Action Items Report

Open Item Number: 07-051

RID Open Date: 7/11/2008

Title: External Touch Temperature Exception

Intiator(s): Trent Martin

Description: AMS-02 exceeds the unlimited contact touch temperature requirements at the EVA connector panel.

Action Item Information

Actionee(s): Leo Cornejo/Boeing

Action Due Date: 8/13/2008

Action: Gain approval of exception to SSP 57213 documenting exceedence.

Action Status: 8/14/2008 - NCR approved by EVA AIT and submitted to Ray Rehm/PSRP. Approval to be discussed on 15 Sep.

8/1/2008 - Updated NCR and memo released to incorporate comments from the panel. Changes under review.

7/16/2008 - When EVA AIT gives approval, NCR will be submitted to PSRP. Final closure expected by 13 Aug.

7/11/2008 - Exception under review by EVA AIT - all comments due back on 24 Jul.

Open Action Items Report

Open Item Number: 07-052

RID Open Date: 7/11/2008

Title: PVGF Cable Tie Exceedence

Initiator(s): Trent Martin

Description: PVGF harness installation guide requires cable ties every six inches, but AMS-02 hardware layout force unsupported length longer than that in one location.

Action Item Information

Actionee(s): Leo Cornejo/Boeing

Action Due Date: 8/15/2008

Action: Gain approval of exception to SSP 57213 documenting exceedence.

Action Status: 7/16/2008 - Exception under review by EVR team. Final approval will be given by SEWG and RICB. ECD is 15 Aug.

Open Action Items Report

Open Item Number: 07-053

RID Open Date: 7/11/2008

Title: DC Magnetic Field Exception

Intiator(s): Trent Martin

Description: AMS-02 ha a DC magnetic field which exceeds nominal SSP 57003 limits.

Action Item Information

Actionee(s): Leo Cornejo/Boeing

Action Due Date: 8/4/2008

Action: Gain approval of exception to SSP 57213 documenting exceedence.

Action Status: 7/16/2008 - Boeing PEI has reviewed and has no issues. GSFC reviewing for possible ELC issues. ECD is 4 Aug.

Open Action Items Report

Open Item Number: 07-054

RID Open Date: 7/11/2008

Title: Thermal Exchange Exception

Initiator(s): Trent Martin

Description: AMS-02 exceeds maximum specular requirements in SSP 57003.

Action Item Information

Actionee(s): Leo Cornejo/Boeing

Action Due Date: 8/13/2008

Action: Gain approval of exception to SSP 57213 documenting exceedence.

Action Status: 7/16/2008 - PTCS analysis is complete and shows no issues. PEI review in work. ECD is 13 Aug.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-06

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): Marco Molina

Action Due Date: 10/21/2008

Action: Re-evaluate thermal optical properties on the top of the PDS as there are no longer heaters located there (breakdown of MLI vs. white paint). QM & FM different ?

Action Status: 8/1/2008 - Action date rolled to 10/21/2008 just because we had gone over a year without a status.
3/26/2007 - Work has restarted - ECD on this question 4/15.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
7/7/06 - Investigate contract status at July TIM.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
8/2/2005 - Awaiting thermal analysis of revised worst hot case.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-08

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): S. Alia

Action Due Date: 10/21/2008

Action: Add 0.03 μ F per 3.2.2.2.2.A of SSP 57003, and add verification by design inspection or test.

Action Status: 8/1/2008 - Action date rolled to 10/21/2008 just because we had gone over a year without a status.
3/26/2007 - Updated reports to be released at PDS MRR in December.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
11/7/2005 - All further PDS activities on hold until 6 Feb 2006.
8/22/2005 - CGS proposes release of updated document by 9/19.
8/15/2005 - Tim Urban to contact Sergio Alia and resolve remaining concerns. Closure expected by 9/5.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-09-2

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): S. Alia

Action Due Date: 10/21/2008

Action: Update document for maximum operating temperature of 51°C (Section 3.2, requirement ID PDS-ENV-3).

Action Status: 8/1/2008 - Action date rolled to 10/21/2008 just because we had gone over a year without a status.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
11/7/2005 - All further PDS activities on hold until 6 Feb 2006.
8/22/2005 - CGS proposes release of updated document by 9/19.
8/2/2005 - MOT should be changed to match updated worst case hot temperature.